

## In the Claims:

1-51. (Canceled)

52. (New) An isolated human monoclonal antibody, or an antigen-binding portion thereof, that has the following properties:

- (a) the antibody binds to human CD89;
- (b) the antibody does not activate complement upon binding to CD89 *in vivo*; and
- (c) the antibody does not block IgA binding to CD89.

53. (New) The antibody of claim 52, wherein the antibody binds to human CD89 with an affinity constant of at least  $10^8 \text{ M}^{-1}$ .

54. (New) The antibody of claim 52, wherein the antibody binds to human CD89 with an affinity constant of at least  $10^9 \text{ M}^{-1}$ .

55. (New) The antibody of claim 52, wherein the antibody heavy chain is an IgG1 heavy chain and the antibody light chain is a kappa light chain.

56. (New) An isolated human monoclonal antibody, or antigen binding portion thereof, comprising a human heavy chain variable region comprising CDR1, CDR2, and CDR3 sequences and a human light chain variable region comprising CDR1, CDR2, and CDR3 sequences, wherein:

(a) the human heavy chain variable region CDR3 sequence comprises an amino acid sequence selected from the group consisting of amino acid residues 99-108 of SEQ ID NO:2, amino acid residues 99-108 of SEQ ID NO:6, and conservative sequence modifications thereof;

(b) the human light chain variable region CDR3 sequence comprises an amino acid sequence selected from the group consisting of amino acid residues 89-97 of SEQ ID NO:4, amino acid residues 90-99 of SEQ ID NO:8, and conservative sequence modifications thereof;

- (c) the antibody binds to human CD89;
- (d) the antibody does not activate complement upon binding to CD89 *in vivo*; and
- (e) the antibody does not block IgA binding to CD89.

57. (New) The antibody of claim 56, wherein the human heavy chain variable region CDR2 sequence comprises an amino acid sequence selected from the group consisting of amino acid residues 50-66 of SEQ ID NO:2, amino acid residues 50-66 of SEQ ID NO:6, and conservative sequence modifications thereof; and the human light chain variable region CDR2 sequence comprises an amino acid sequence selected from the group consisting of amino acid residues 50-56 of SEQ ID NO:4, amino acid residues 51-57 of SEQ ID NO:8, and conservative sequence modifications thereof.

58. (New) The antibody of claim 56, wherein the human heavy chain variable region CDR1 sequence comprises an amino acid sequence selected from the group consisting of amino acid residues 30-35 of SEQ ID NO:2, amino acid residues 31-35 of SEQ ID NO:6, and conservative sequence modifications thereof; and the human light chain variable region CDR1 sequence comprises an amino acid sequence selected from the group consisting of amino acid residues 24-34 of SEQ ID NO:4, amino acid residues 24-35 of SEQ ID NO:8, and conservative sequence modifications thereof.

59. (New) An isolated human monoclonal antibody selected from the group consisting of:

(a) an antibody comprising (i) a heavy chain variable region comprising CDR1, CDR2, and CDR3 sequences comprising amino acid residues 30-35, amino acid residues 50-66, and amino acid residues 99-108 of SEQ ID NO:2, respectively; and (ii) a light chain variable region comprising CDR1, CDR2, and CDR3 sequences comprising amino acid residues 24-34, amino acid residues 50-56, and amino acid residues of 89-97 of SEQ ID NO:4, respectively, wherein the antibody binds to human CD89; and

(b) an antibody comprising (i) a heavy chain variable region comprising CDR1, CDR2, and CDR3 sequences comprising amino acid residues 31-35, amino acid residues 50-66, and amino acid residues 99-108 of SEQ ID NO:6, respectively; and (ii) a light chain variable region comprising CDR1, CDR2, and CDR3 sequences comprising amino acid residues 24-35, amino acid residues 51-57, and amino acid residues 90-99 of SEQ ID NO:8, respectively, wherein the antibody binds to human CD89.

60. (New) An isolated human monoclonal antibody, or antigen binding portion thereof, comprising a human heavy chain variable region and a human light chain variable region, wherein:

(a) the human heavy chain variable region comprises an amino acid sequence that is at least 90% homologous to the amino acid sequence of SEQ ID NO:2;

- (b) the human light chain variable region comprises an amino acid sequence that is at least 90% homologous to the amino acid sequence of SEQ ID NO:4;
  - (c) the antibody binds to human CD89;
  - (d) the antibody does not activate complement upon binding to CD89 *in vivo*;
- and
- (e) the antibody does not block IgA binding to CD89.

61. (New) An isolated human monoclonal antibody, or antigen binding portion thereof, comprising a human heavy chain variable region and a human light chain variable region, wherein:

- (a) the human heavy chain variable region comprises an amino acid sequence that is at least 90% homologous to the amino acid sequence of SEQ ID NO:6;
  - (b) the human light chain variable region comprises an amino acid sequence that is at least 90% homologous to the amino acid sequence of SEQ ID NO:8;
  - (c) the antibody binds to human CD89;
  - (d) the antibody does not activate complement upon binding to CD89 *in vivo*;
- and
- (e) the antibody does not block IgA binding to CD89.

62. (New) An isolated human monoclonal antibody, or antigen binding portion thereof, comprising human heavy chain and human light chain variable regions comprising the amino acid sequences shown in SEQ ID NO:2 and SEQ ID NO:4, respectively.

63. (New) An isolated human monoclonal antibody, or antigen binding portion thereof, comprising human heavy chain and human light chain variable regions comprising the amino acid sequences shown in SEQ ID NO:6 and SEQ ID NO:8, respectively.

64. (New) An isolated human monoclonal antibody comprising:
- (a) a heavy chain variable region derived from a human germline V<sub>H</sub> 3-30.3 gene; and
  - (b) a light chain variable region derived from a human germline V<sub>K</sub> L18 or V<sub>K</sub> A27 gene;
- wherein the human antibody binds human CD89.

65. (New) The antibody of claim 64, wherein the light chain variable region is derived from a human germline V<sub>K</sub> L18 gene.

66. (New) The antibody of claim 64, wherein the light chain variable region is derived from a human germline V<sub>K</sub> A27 gene.

67. (New) The antibody of claim 1, wherein the antibody is a Fab fragment or a single chain antibody.

68. (New) A hybridoma comprising a B cell obtained from a transgenic nonhuman animal having a genome comprising a human heavy chain transgene and a light chain transgene fused to an immortalized cell, wherein the hybridoma produces a detectable amount of the antibody of claim 1.

69. (New) A transfectoma comprising nucleic acids encoding a human heavy chain and a human light chain, wherein the transfectoma produces a detectable amount of the antibody of claim 1.

70. (New) A transgenic nonhuman animal which expresses the antibody of claim 1, wherein the transgenic nonhuman animal has a genome comprising a human heavy chain transgene or transchromosome and a human light chain transgene.

71. (New) A method of producing the antibody of claim 1, comprising:  
immunizing a transgenic nonhuman animal having a genome comprising a human heavy chain transgene and a human light chain transgene with human CD89 or a cell expressing human CD89, such that antibodies are produced by B cells of the animal;  
isolating B cells of the animal;  
fusing the B cells with myeloma cells to form immortal, hybridoma cells that secrete human monoclonal antibodies specific for CD89; and  
isolating the human monoclonal antibodies specific for CD89 from the culture supernatant of the hybridoma.

72. (New) A bispecific or multispecific molecule comprising the antibody of claim 1 and a portion which binds to a target antigen other than CD89.

73. (New) The bispecific or multispecific molecule of claim 72, wherein the antibody is an Fab fragment or a single chain antibody.

74. (New) The bispecific or multispecific molecule of claim 72, wherein the target antigen is a tumor antigen.

75. (New) The bispecific or multispecific molecule of claim 72, wherein the portion that binds to the target antigen comprises an antibody or a tumor ligand.

76. (New) The bispecific or multispecific molecule of claim 72 comprising a fusion protein.

77. (New) The bispecific or multispecific molecule of claim 72 comprising a chemically linked conjugate.

78. (New) The bispecific or multispecific molecule of claim 72 which induces lysis (ADCC) of a cell expressing the target antigen in the presence of effector cells expressing CD89.

79. (New) The bispecific or multispecific molecule of claim 72, wherein the antigen is selected from the group consisting of carcinoembryonic antigen (CEA), gastrin releasing peptide receptor antigen (GRP), mucine antigens, epidermal growth factor receptor (EGF-R), HER2/*neu*, HER3, HER4, CD20, CD30, MAGE antigens, SART antigens, MUC1 antigen, c-erb-2 antigen and TAG 72.

80. (New) A molecular conjugate comprising the human antibody of claim 1 linked to an antigen.

81. (New) The molecular conjugate of claim 80, wherein the antibody is an Fab fragment or a single chain antibody.

82. (New) The molecular conjugate of claim 80 comprising a fusion protein.

83. (New) The molecular conjugate of claim 80 comprising a chemically linked conjugate.

84. (New) The molecular conjugate of claim 80, wherein the antigen is selected from the group consisting of carcinoembryonic antigen (CEA), gastrin releasing peptide receptor antigen (GRP), mucine antigens, epidermal growth factor

receptor (EGF-R), HER2/*neu*, HER3, HER4, CD20, CD30, MAGE antigens, SART antigens, MUC1 antigen, c-erb-2 antigen and TAG 72.

85. (New) A composition comprising the antibody of claim 1 and a pharmaceutically acceptable carrier.

86. (New) A composition comprising the bispecific or multispecific molecule of claim 72 and a pharmaceutically acceptable carrier.

87. (New) A composition comprising the molecular conjugate of claim 80 and a pharmaceutically acceptable carrier.

88. (New) A composition comprising a combination of two or more antibodies of claim 1, wherein each of said antibodies binds to a distinct epitope of human CD89.

89. (New) The composition of claim 85 further comprising a cytotoxic agent.

90. (New) An immunotoxin comprising the antibody of claim 1 linked to a cytotoxic agent.

91. (New) A method of inhibiting growth of a cell comprising contacting the cell with an effective amount of the bispecific or multispecific molecule of claim 72 such that growth of the cell is inhibited, wherein the bispecific or multispecific molecule includes a portion which binds to an antigen on the cell.

92. (New) The method of claim 91, wherein the antigen is a tumor antigen.

93. (New) The method of claim 92, wherein the tumor antigen is from a cancer cell selected from the group of cancers consisting of ovarian cancer, breast cancer, testicular cancer, prostate cancer, leukemia, and lymphoma.

94. (New) The method of claim 91, wherein the antigen is an autoantigen.

95. (New) The method of claim 91, wherein the antigen is from a microorganism.

96. (New) The method of claim 95, wherein the microorganism is selected from the group consisting of a bacterium, a virus, and a parasite.

97. (New) A method of treating or preventing a disease characterized by precipitation of IgA-immune complexes, comprising administering to a subject in need of treatment an isolated human monoclonal antibody that specifically binds to CD89 in an amount effective to treat or prevent the disease, wherein the monoclonal antibody blocks IgA binding to CD89.

98. (New) The method of claim 97, wherein the disease characterized by precipitation of IgA-immune complexes is selected from the group consisting of chronic hepatitis, Henoch-Schonlein purpura (HSP), Berger's disease, and IgA-glomerulonephritis.

99. (New) A method of detecting the presence of CD89 or a cell expressing CD89 in a sample, comprising:

contacting the sample with the antibody of claim 1 under conditions that allow for formation of a complex between the antibody and CD89; and  
detecting the formation of the complex.

100. (New) An expression vector comprising a nucleotide sequence encoding the variable region of the heavy chain, light chain, or both heavy and light chains of a human monoclonal antibody which binds to human CD89, wherein the heavy chain nucleotide sequence is selected from the group consisting of SEQ ID NO: 1 and SEQ ID NO: 5 and the light chain nucleotide sequence is selected from the group consisting of SEQ ID NO: 3 and SEQ ID NO: 7.